

ABSTRACT OF THE DISCLOSURE

**APPARATUS AND METHOD FOR DETERMINING LOAD BALANCING
WEIGHTS USING APPLICATION INSTANCE STATISTICAL INFORMATION**

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An apparatus and method for distributing traffic across a group of machines using application instance statistics. In order to perform load balancing in accordance with the present invention, a method of generating weights to bias load balancing distributions is provided. The application instances to which traffic is being distributed, or the
10 application middleware, are instrumented to establish certain metrics about the application while running. The application instance instrumentation will provide application statistics such as number of successful transactions, application response times, application topology, importance of transactions being processed, time the application is blocked waiting for resources, resource consumption data, and the like.
15 These metrics are collected, processed, and then presented as a set of weights to the load balancing apparatus to govern its distribution of traffic. With such application metrics available, traffic can be disbursed based on the current state of the application instances and other application instances in the transaction's path, the application instance's likelihood to complete the request, or even higher level business-oriented goals.